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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/086,802	03/04/2002	Mauritius Seeger	112132	1618

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EXAMINER	
KASSA, YOSEF	
ART UNIT	**PAPER NUMBER**
2625	

DATE MAILED: 01/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/086,802	SEEGER ET AL.	
	Examiner	Art Unit	
	YOSEF KASSA	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 March 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *9-20* is/are allowed.

6)☒ Claim(s) *1-8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *04 March 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *03/04/02*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 1-5 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada (U.S. patent 6,697,536), and further in view of Matsuda et al (U.S. Patent 5,764,379).

With regard to claim 1, Yamada discloses an input for receiving an image from a camera (see Fig. 3, item 101, image scanning apparatus);

at least one image buffer for storing data representing an image frame (see Fig. 3, item 103, broadly reads on image memorizing section);

a motion detector, i.e., movement detection, coupled to said at least one image buffer (see Fig. 3, note that item 103 movement detection section is coupled to item 103 image memorizing section) for processing said image to detect motion between frames of said image (see col. 5, lines 54-59, note that the hand movement and the document movement is detected);

an image processor coupled to said at least one image buffer for processing an image therein to extract document information from the image (see col. 5, lines 60-67, which reads on the process of extracting features of the hand movement); and

a control device (see Fig. 8, item 401) responsive to the output from said motion detector for controlling said image processor (see Fig. 3, items 110 and 111 Judging (controlling) based on the output from movement detection section) to begin processing when said motion detector detects said image has become stationary, i.e., still image detection, after movement (see col. 11, lines 22-31).

While Yamada discloses image memorizing section, he does not expressly call for buffer for storing image frame. However, at the same field of endeavor, Matsuda et al teaches this feature (see Fig. 9, item 29). At the time of invention was made, it would have been obvious to an ordinary skill in the art to incorporate the teaching of Matsuda et al buffer memory into Yamada's system. The motivation doing so is to provide buffer memory to store scanned image information.

With regard to claim 2, Yamada discloses wherein said control device (see controller in Fig. 8, item 401) is operable to halt, i.e., stop, said image processor if said motion detector detects image motion from said input while said image processor is performing image processing (see col. 11, lines 22-31).

With regard to claim 3, Yamada discloses wherein said at least one image buffer comprises a first buffer for storing a first frame of said image (see Fig. 8, item 402) and a second buffer for storing a second frame of said image (see Fig. 8, item 403), and wherein said motion detector is operable to compare the contents of said first and second buffers to detect said motion between said frames of said image (see col. 9, lines 63-65 and also see Fig. 9, S3-2 and S3-3).

With regard to claim 4, Yamada discloses wherein said motion detector is

operable to determine whether said movement corresponds to a first type of motion and a second type of motion (see Fig. 6, step S1-2, which reads on hand movement and document movement).

With regard to claim 5, Yamada discloses wherein said first type of motion is motion quantified as being larger than a threshold value and said second type of motion is motion quantified to be less than or equal to the threshold value (see col. 10, lines 59-65, which broadly reads on threshold calculation process).

With regard to claim 8, Yamada discloses wherein said control device is operable to freeze said image in said image buffer prior to controlling said image processor to begin image processing (see col. 11, lines 28-36).

2. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada (U.S. patent 6,697,536) and Matsuda et al (U.S. Patent 5,764,379) as applied to claims 1-5, 7 and 8 above, and further in view of Heins, III (U.S. Patent 5,649,026).

With regard to claim 6, Yamada discloses control device is operable, in response to motion detector detecting movement to be first type of motion, to control image processor on said image when image becomes stationary (see col. 11, lines 22-28).

Yamada does not explicitly call for perform optical character recognition. However, at the same field of endeavor, Heins, III teaches this feature (see col. 6, lines 27-41). At the time of invention was made, it would have been obvious to an ordinary skill in the art to incorporate the teaching of Heins, III optical character recognition process into Yamada's system. The motivation doing so is to provide a process of scanning a character image to recognize optically scanned character image feature.

Claim 7 is similarly analyzed as claim 6.

Allowable Subject Matter

3. Claims 9-17 and 18-20 are allowed.

The following is an examiner's statement of reasons for allowance. The closest prior art of record failed to teach or suggest, concurrently while in the frozen mode, monitoring a current live image from the sequence of live images to detect motion in the frozen image, processing results from the selected image processing operation are made available for further use when processing completes and a transition between the frozen mode to the live operating mode has not taken place, and the frozen operating mode transitioning to the live operating mode once motion between the frozen image and the current live image is detected (claims 9-17); and determining whether motion in image from first image to second subsequent image exceeds a motion threshold, and mapping extracted document information only if motion does not exceed motion threshold, and first image analysis is performed on second subsequent image if motion exceeds threshold (claims 18-20). Therefore, in combination with all the other limitations claims 9-17 and 18-20 are allowable.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Other Prior Art Cited

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent No. (5,610,720) to Fujioka et al disclose book document reading device having a page turning capability.

US Patent No. (5,835,663) to Momochi disclose apparatus for recording image data...

US Patent No. (5,834,762) to Matsuda et al discloses image reading apparatus and method.

US Patent No. (6,323,963) to Takahashi disclose book page document image reading apparatus.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to YOSEF KASSA whose telephone number is (703) 306-5918. The examiner can normally be reached on Monday-Thursday from 8:00 AM to 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, BHAVESH MEHTA can be reached on (703) 308-5246. The fax phone numbers for the organization where this application or proceeding is assigned is (703)

872-9306 for regular communication and (703) 872-9306 for after Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PATENT EXAMINER

Yosef Kassa

12/22/04.